

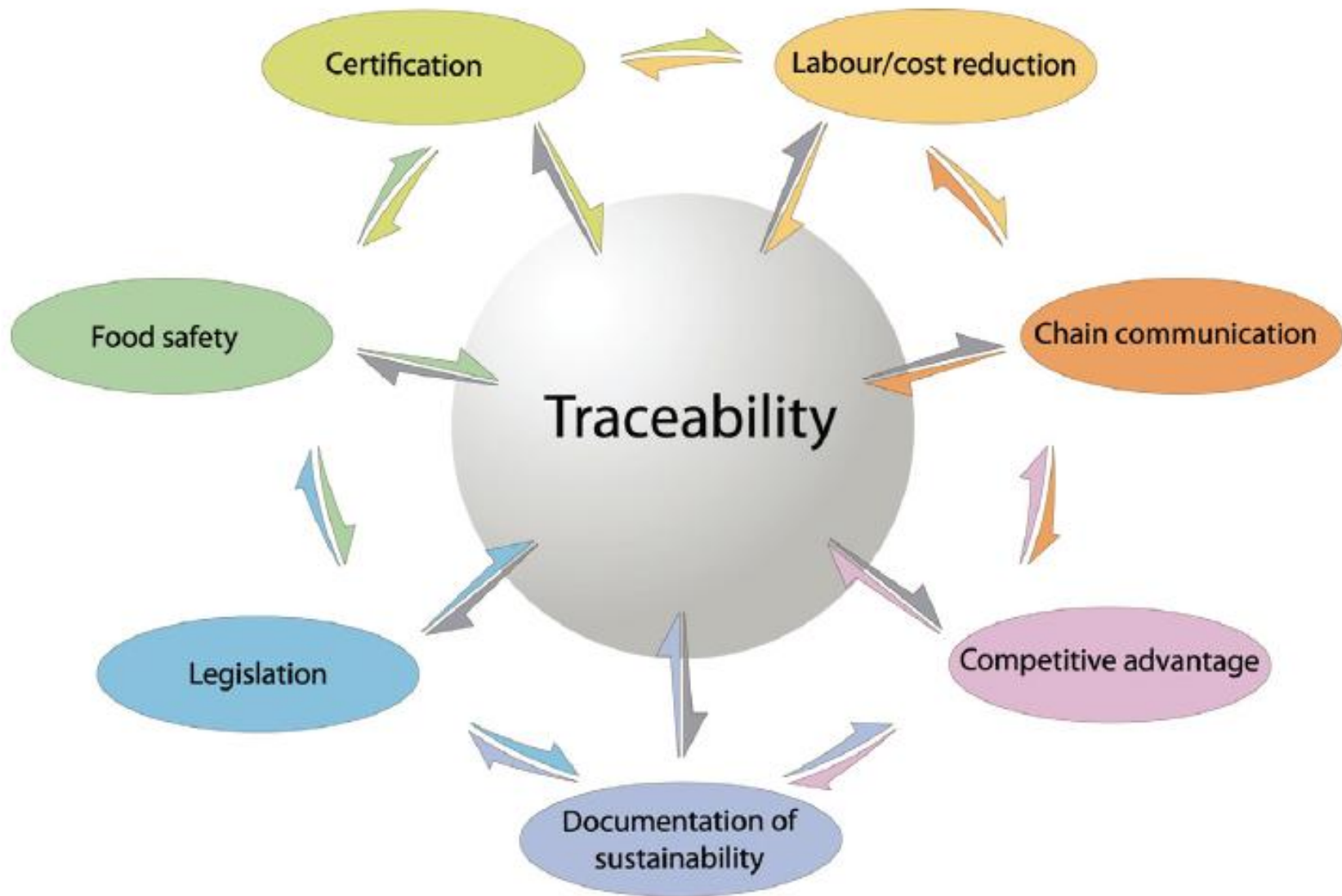


EPCIS - a tool for food supply chain traceability

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The driving forces for traceability in the EU

modified from Olsen (2009).



- **Traceability of every batch back to origin**
- **Including before/after split or blend**
- **Information to follow physical box**

Systems should be up and running 1.1.2012

The eTrace project

- Two-year project in SAFEFOODERA – Topic Traceability
- Project period: April 2009-April 2011
- Participants: SINTEF, Matis, Tracetracker, ROI4U, The Swedish board of Fisheries and Lund University.

eTrace aims to specify, develop, and evaluate an electronic traceability system where different information sources related to food safety and suitable enterprise management systems are integrated with EPCIS standard.



http://www.tracefood.org/index.php/International:SAFEFOODERA_eTrace

EPC standard answer 4 questions

What, Where, When, and Why

What

- EPC number
- Manufacturing Data (lot, batch, expiration date)
- Transactional Data (PO, Shipment, Invoice)

Where

- Location (can be fixed or moving)

When

- Event Time
- Record Time

Why

- Business Process Step –e.g.: Receiving, Shipping
- Product State –e.g.: Saleable, Active, In Transit
- Current Conditions –e.g.: Temperature

The EPCIS standard defines a schema for physical visibility data, and interfaces for the capture and query of this data.

Swedish pilot

- Chain traceability
- Day-boats
- Manual processing

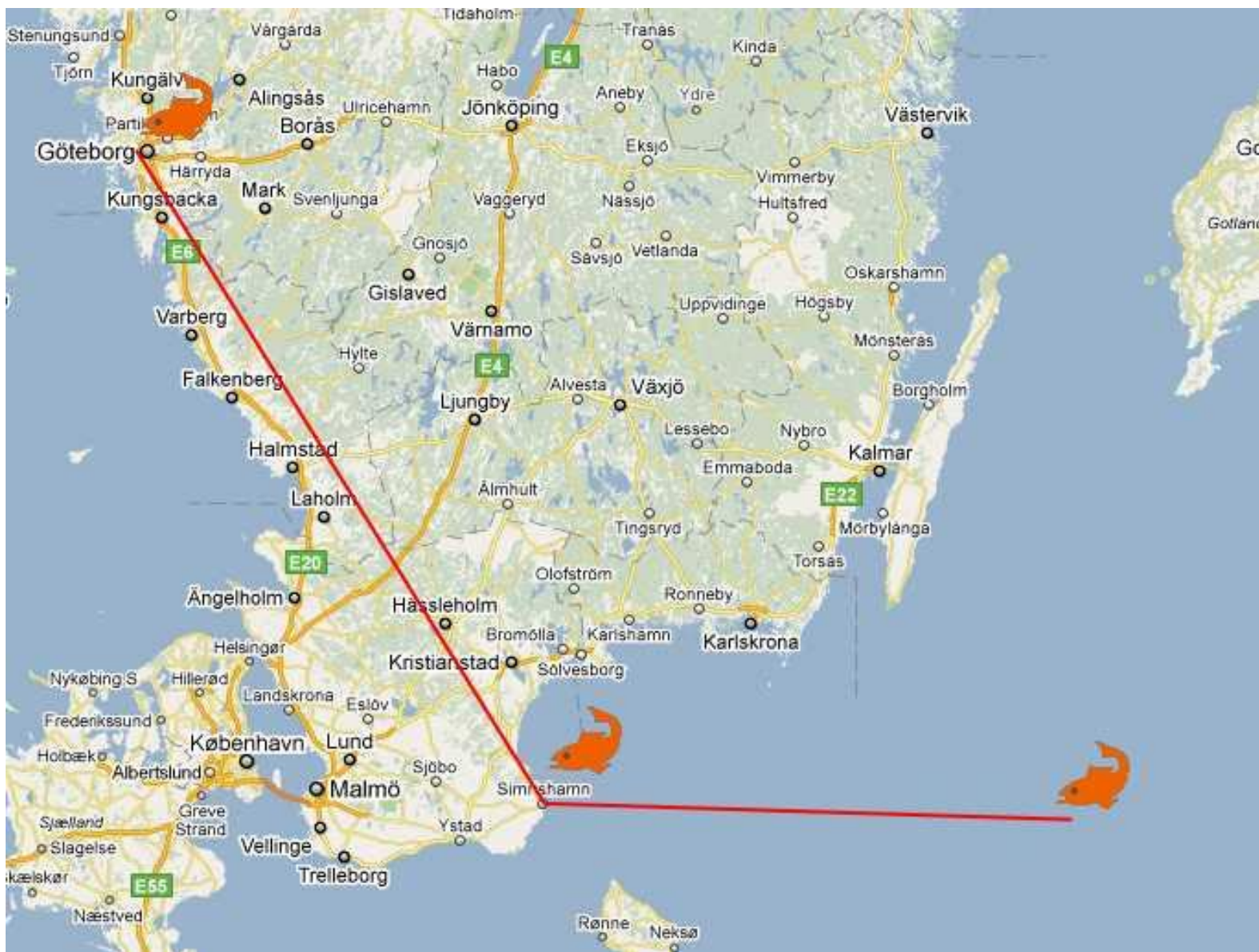


Icelandic pilot

- Internal traceability
- Trawlers
- Automatic processing



Swedish pilot



Icelandic pilot – redfish traceability



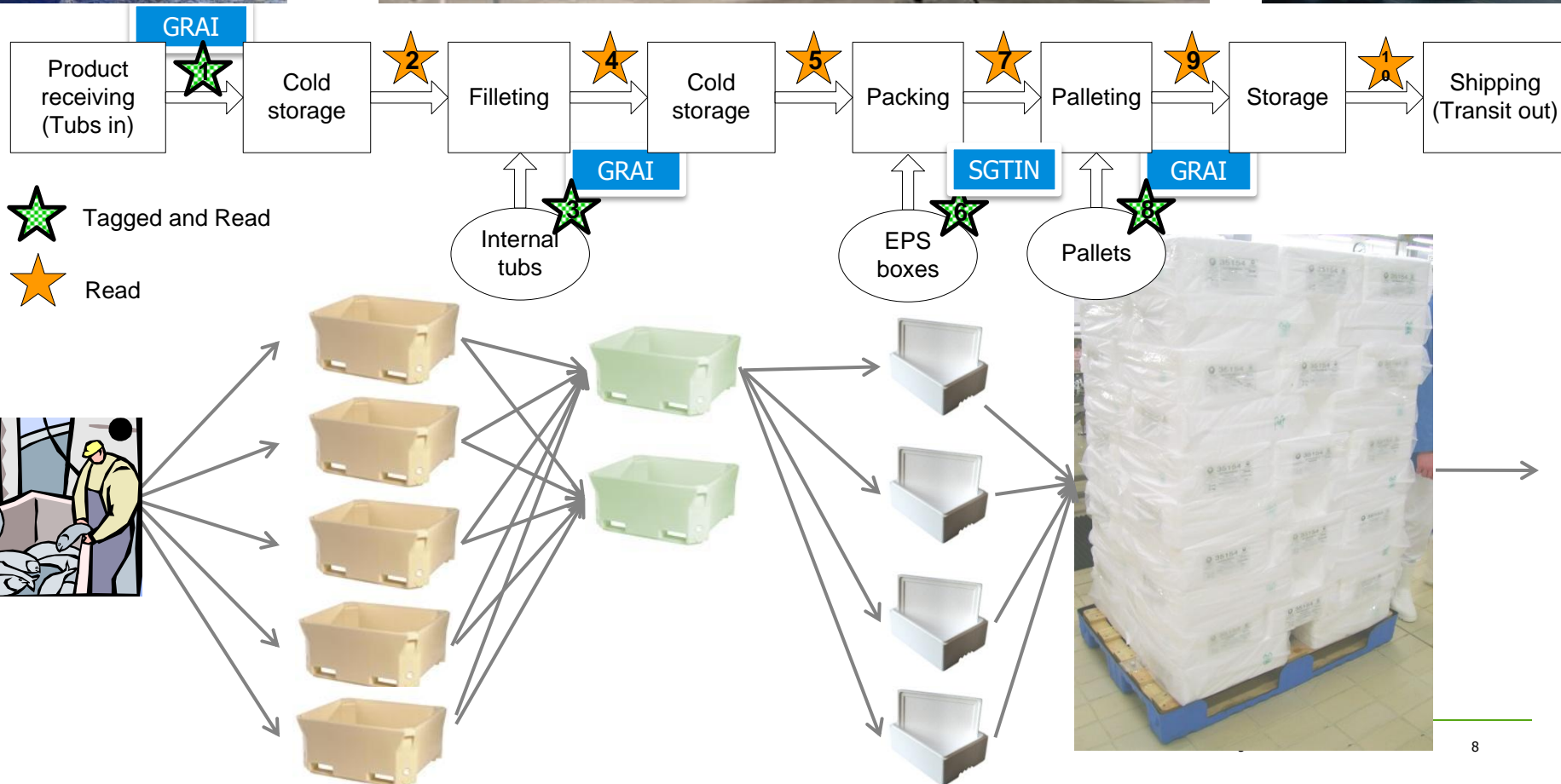
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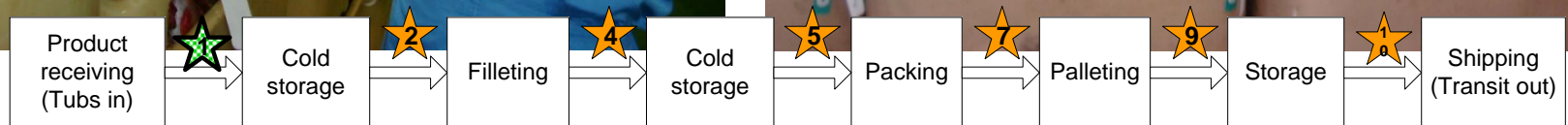


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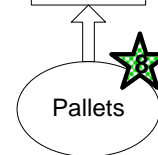
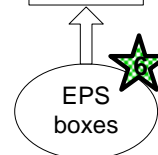
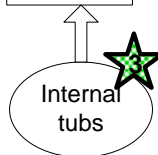
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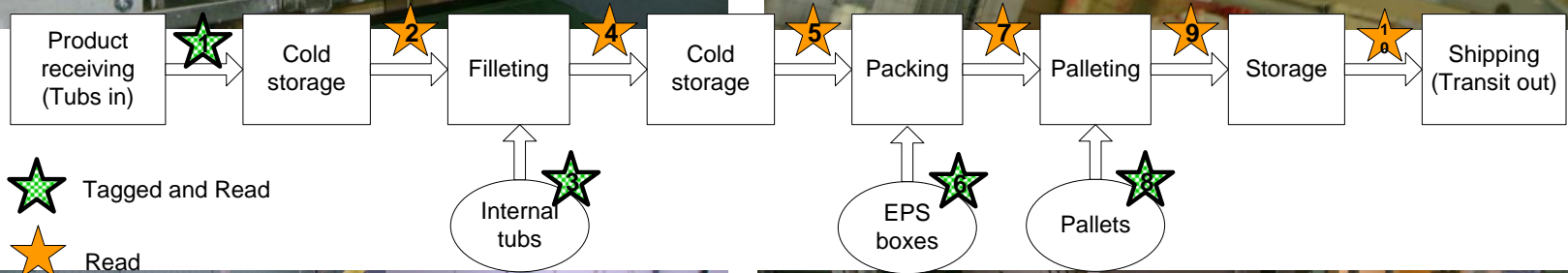
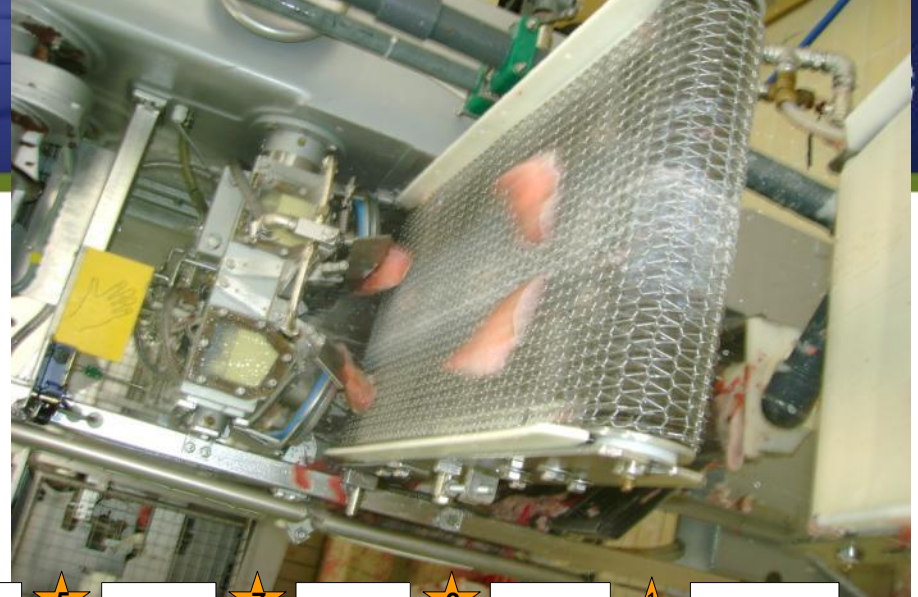




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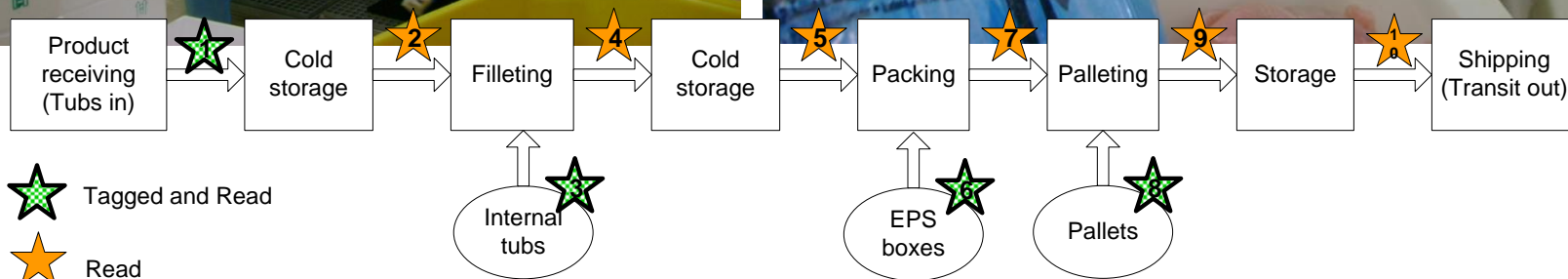
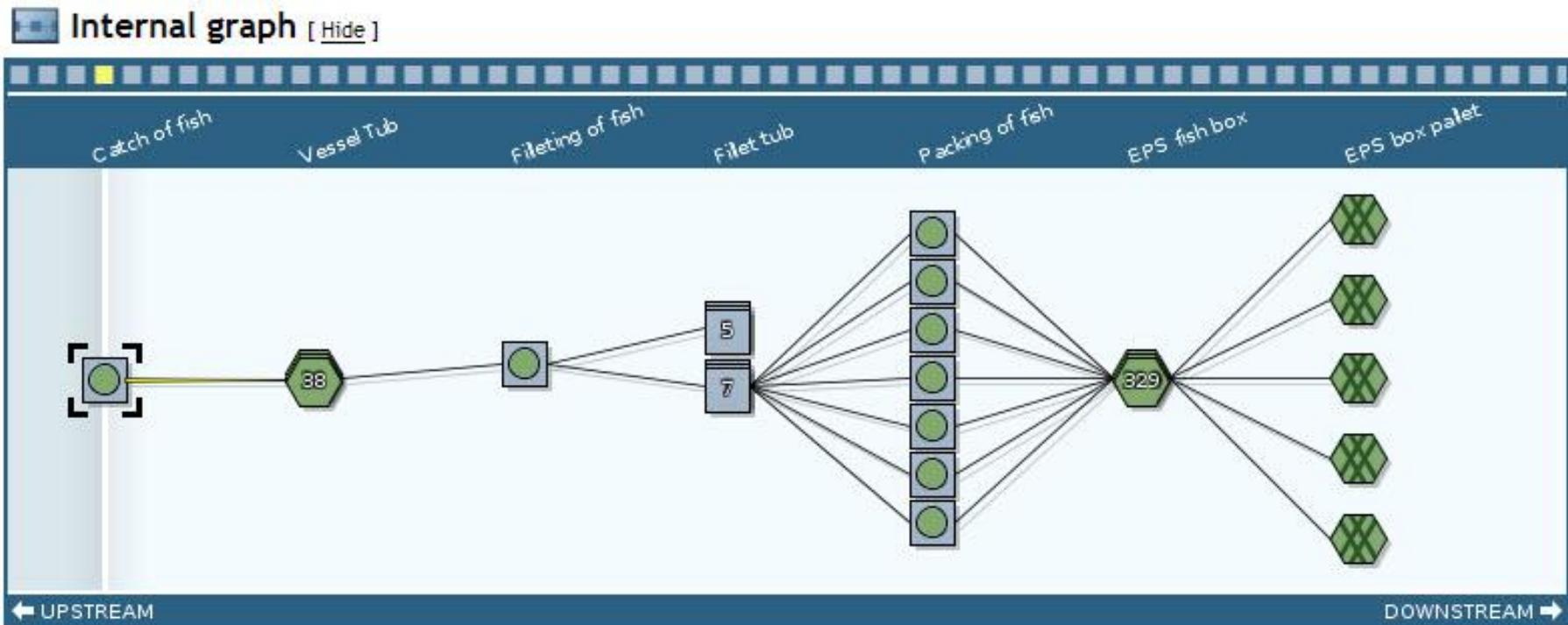


Figure shows one fishing day which resulted in 38 vessel tubs of iced redfish, modeled as one catch to simplify internal traceability.



etrace
ec=te8rfid

Industry potential:

- **this RFID EPCIS traceability system enables finer granularity**
- **simpler catch certificates.**
- **increased information flow through the value chain**
- **gateway for customers to access products information**
- **opportunities for better processing control of products and even greater efficiency opens**
- **increased automation in the processing of fish**



The future...

- **Tubs with fixed RFID**
- **Automatic reading stations in processing plants**
 - **may provide a faster and more efficient way of information capture and exchange**
 - **reduce manpower needed**

